In the Claims:

1. (currently amended) A method of scribing a semiconductor wafer ~~coated with a material~~; comprising:

imaging the wafer;

generating a picture of the wafer from the image of the wafer, the picture identifying the scribe lines of the wafer; ~~under the material; and~~

mapping the coordinates of the identified scribe lines on the wafer from the picture;

providing the coordinates of the scribe lines to a dicing machine;

scribing the wafer using the ~~identified~~ coordinates of the scribe lines.

2. (original) The method of claim 1, wherein the wafer is imaged using an infrared camera.

3. (original) The method of claim 2 wherein the picture is generated by measuring the emissivity of features on the wafer surface including the scribe lines.

4. (cancelled) The method of claim 3, further comprising:

mapping the coordinates of the identified scribe lines on the wafer from the picture; and

providing the coordinates of the scribe lines to a dicing machine.

5. (currently amended) The method of claim [[4]] 1, controlling the dicing of the wafer using the coordinates of the scribe lines.

6. (original) The method of claim 1, wherein the imaging of the wafer further comprises;

heating the wafer to a predetermined temperature; and

measuring the emissions of the heated wafer using an infrared camera.

7. (original) The method of claim 6, wherein the predetermined temperature is approximately 90 degrees C or less.

8. (original) The method of claim 6, wherein the predetermined temperature is less than the reflow temperature of the material on the wafer.

9. (currently amended) The method of claim 1, wherein the ~~material is opaque~~ wafer is covered with an opaque material.

10. (original) The method of claim 1, wherein the wafer is imaged using X-rays.

11. (original) The method of claim 1, wherein the wafer is imaged using ultrasound.

12. (original) An apparatus comprising:

a stage configured to support a wafer;

an imaging unit configured to generate an image of the wafer on the stage; and

a computer configured to identify the coordinates of scribe lines on the wafer from the image of the wafer.

13. (original) The apparatus of claim 10, further comprising a temperature controller configured to control the temperature of the wafer on the stage.

14. (original) The apparatus of claim 12, wherein the imaging unit is an infrared camera.

15. (original) The apparatus of claim 12, wherein the imaging unit uses X-rays to generate the image of the wafer.

16. (original) The apparatus of claim 12, wherein the imaging unit uses ultrasound waves to generate the image of the wafer.

17. (original) The apparatus of claim 12, further comprising a dicing machine configured to dice the wafer using the coordinates of the scribe lines identified by the computer.